



# FEMA

## MITIGATION DIRECTORATE

# National Dam Safety Program

## DAM SAFETY IN THE UNITED STATES

*As the lead Federal agency for the National Dam Safety Program, the Federal Emergency Management Agency (FEMA) is responsible for coordinating efforts to secure the safety of dams throughout the United States. Congress' passage of the National Dam Safety Program Act of 2006 reauthorized the program for 5 more years. The program makes Federal funds available to the States, which are primarily responsible for protecting the public from dam failures of non-Federal dams, and pursuing initiatives that enhance the safety of dams posing the greatest risk to people and property.*

## CLASSIFICATION OF DAMS

Dams are classified as high, significant, or low hazard potential. Hazard potential does not reflect the condition of the dam, but identifies the potential consequences of dam failure.

- Failure of a *high hazard* dam, for any reason, could result in loss of life, significant property damage, service disruptions, and environmental damage.
- If a *significant hazard* dam should fail for any reason, extensive property damage, service disruptions, and environmental damage could occur beyond the owner's property.
- Damages from a *low hazard* dam failure do not extend beyond the dam owner's property.

## FEDERAL SUPPORT FOR STATE PROGRAMS

FEMA provides financial assistance to States' dam safety programs under the National Dam Safety Program Act of 2006. National performance criteria are used to determine a State's eligibility. The funds are used for inspecting and monitoring dams, training dam operators, analyzing data, purchasing equipment, and assisting in the preparation of Emergency Action Plans (EAPs) to be followed in the

event of a dam failure. The grants have totaled approximately \$3.5 million per year over the last 8 years.

Other program activities support stakeholders in the dam safety community, such as:

- Research on risk assessment techniques, design and construction standards, seepage and internal erosion, hydrologic and earthquake threats, inspection techniques, monitoring equipment, maintenance and rehabilitation, impacts of vegetation and animals on embankment dams, new technologies, and other issues.
- Training in dam safety for dam operators, owners, and regulators.

In addition, FEMA works with its Federal and private sector partners to develop technologies to help secure the safety of dams. Examples are:

- National Inventory of Dams (NID) – A database of about 79,500 dams in the United States maintained by the U.S. Army Corps of Engineers. The database is used for water resource management, land use planning, floodplain management, risk management, and emergency action planning.
- Dam Safety Program Management Tools – An interactive software program used for assessing the effectiveness of State dam safety programs.

### DAM SAFETY: A SHARED RESPONSIBILITY

The National Inventory of Dams currently lists about 79,500 dams in the United States. The Federal government owns about 5 percent of the dams; States 5 percent; local governments 20 percent; private entities 56 percent; and public utilities about 2 percent. Owners are responsible for the safety and maintenance of the dams.



# FEMA

## CREATING FEDERAL POLICY

As part of its leadership role, FEMA chairs the following two organizations, which serve to guide the National Dam Safety Program:

The **National Dam Safety Review Board (Board)** advises FEMA on national dam safety priorities, coordinates Federal-State activities, and assesses States' progress in meeting performance criteria defined under the National Dam Safety Program Act of 2006. Board membership includes representatives from Federal and State agencies, and the private sector. The Board is chaired by FEMA and consists of five Federal dam safety officials, five State dam safety officials, and one private sector dam safety official.

The **Interagency Committee on Dam Safety (ICODS)** coordinates Federal policies, guidelines, and activities related to dam safety. For example, the Committee developed *Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners* (FEMA 64), available online at: <http://www.fema.gov/library/viewRecord.do?id=1672>. The guide provides information on how to prepare an EAP and describes procedures for early warning that can minimize property damage and loss of life in the event of a dam failure.

The ICODS is chaired by FEMA and includes the following Federal agencies, which build, own, operate, or regulate dams: Department of Agriculture; Department of Defense; Department of Energy; Department of the Interior; Department of Labor; Mine Safety and Health Administration; Federal Energy Regulatory Commission; Department of State, International Boundary and Water Commission (U.S. Section); Nuclear Regulatory Commission; and Tennessee Valley Authority.

## PARTNERSHIPS KEY TO PROGRAM SUCCESS

In addition to the National Dam Safety Review Board and the Interagency Committee on Dam Safety, FEMA partners with professional organizations in the effort to secure the safety of dams.

The **Association of State Dam Safety Officials (ASDSO)** is a national non-profit organization of State and Federal dam safety regulators, dam owners and operators, engineering consultants, manufacturers and suppliers, academia, and contractors. The organization supports programs and policies designed to increase dam safety. For more information, go to: <http://www.damsafety.org>.

The **United States Society on Dams (USSD)** is a national professional organization that represents primarily private sector interests with representatives from the private sector and some governmental agencies. The USSD seeks to advance the technology of dam engineering, construction, operation, maintenance, and dam safety; foster socially and environmentally responsible water resources projects; and promote awareness of the role of dams in managing the Nation's water resources. USSD is located on the web at: <http://www.ussdams.org>.

### FOR MORE INFORMATION

To obtain additional dam safety resources, visit the FEMA website: <http://www.fema.gov/plan/prevent/damfailure/ndsp>.

